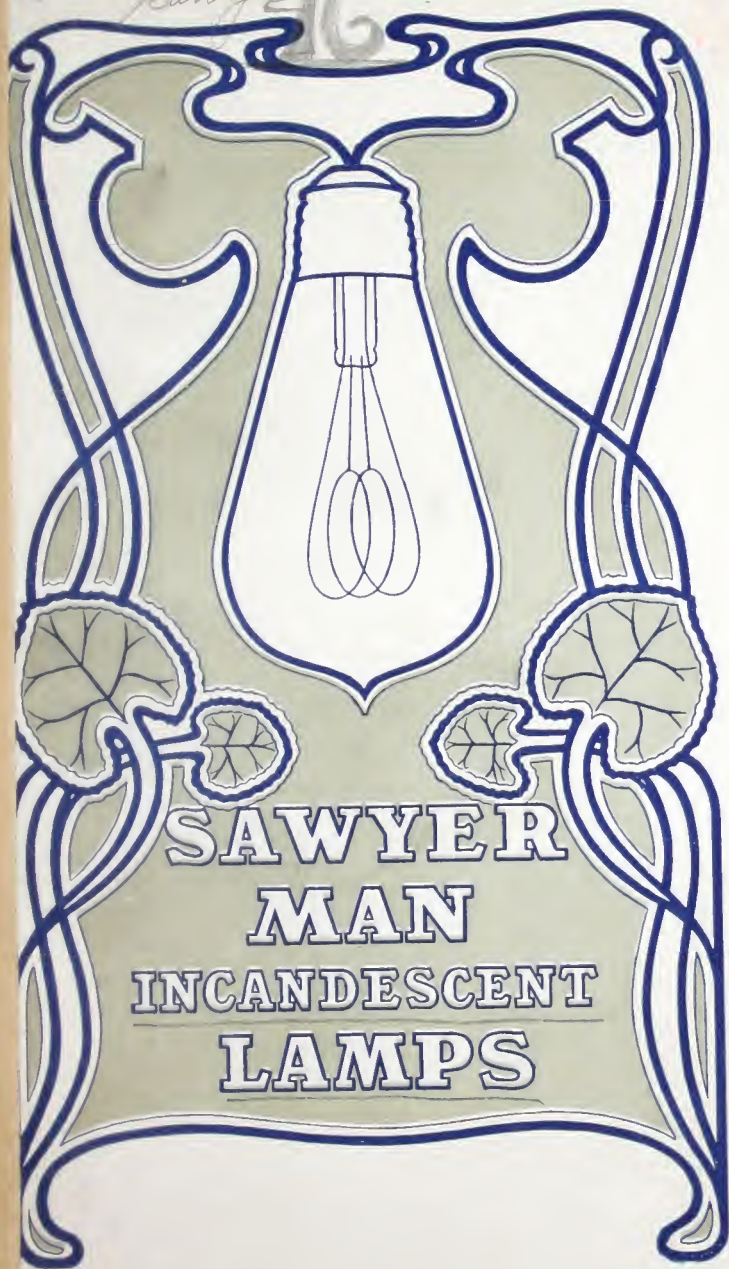


21,32 Sawyer





# CATALOGUE

of

# LAMPS

AS MADE BY

SAWYER-MAN ELECTRIC CO.

NEW YORK, N. Y.

AND SOLD BY

WESTINGHOUSE ELECTRIC &  
MANUFACTURING CO.

PITTSBURG, PA.

# THE SAWYER-MAN LAMPS

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Standard Sawyer-Man Lamps are represented in the illustrations on the following pages, and are made up according to the characteristics represented by the illustrations and the accompanying data. For instance, page 4 shows a cut of a lamp made with a coiled loop unanchored filament. The scale to which cut is made is full size, the bulb is a straight sided bulb and measures from end of base to tip three and three-eighths inches. The diameter of the largest horizontal section is one and three-fourths inches. Lamps are made up in this type in voltages from forty to sixty and from ninety to one hundred and thirty volts, and in two, three and four candle powers. These lamps are, however, regularly so made that at two candle power the energy consumption is seven watts per candle. The three candle power lamp made in this type consumes approximately 16.5 watts, or burns, using five and one-half watts per candle. The four candle lamp is a four and one-half watt per candle lamp.

## SPECIAL LAMPS

Lamps not represented in this catalogue are not made as a stock article and can only be made up to order.

## COLORLED LAMPS

Lamps made up in natural colored glass as called for in some types are made in green, blue, ruby, purple, opal and amber.

Frosted and artificially colored lamps are furnished in all candle powers, types and sizes, but lamps so colored are generally not satisfactory in the higher candle powers or for out of door work.

## SERIES LAMPS

Lamps for use in multiple series by railway lighting and for use with the Westinghouse Shunt Coil System differ from other lamps only in the careful selection made for current consumption. Orders for lamps for use in series with lamps of other makes should, if possible, be accompanied by a new sample of such lamp. Special care is exercised in the factory to furnish on subsequent orders lamps of the same characteristics.

## SELECTION

As described at length in other publications, the selection of the lamp to be ordered is quite as important as the selection used on the order. The proper lamp should be ordered according to the actual conditions of use, not the ideal condition prevailing a short part of the time.

The factory system and conditions are such that orders calling for special selections can be promptly attended to.

## BASES

Lamps are furnished in any base desired. Unless otherwise specified, when T. H. or "B" base is called for, the porcelain type is used with from 2-25 c.p.; from 32 to 100 c.p. the brass base is used.

Unless otherwise specified as to be used in places of extreme high temperatures all lamps are based, using a cement that is waterproof.

## DIMENSIONS

Lengths as specified in the cuts are for lamps with the standard Edison or F base. For other bases the following correction is necessary.

Thompson-Houston (Porcelain) 2 to 25 c.p.	add	$\frac{1}{8}$ inch
" " (Brass) . . . 50 c.p.	subtract	$\frac{1}{4}$ "
" " " " . . . 100 c.p.	"	$\frac{1}{8}$ "
Sawyer-Man or Westinghouse 2 to 32 c.p.	add	$\frac{3}{16}$ "
" " " " . . . 50 c.p.	"	$\frac{1}{8}$ "

## STANDARD OF LIGHT

All Sawyer-Man Lamps are measured for candle power by comparison with the British Parliamentary Standard Candle Power, as furnished by the National Bureau of Standards at Washington.



# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $3\frac{3}{8}$

Diam.  $1\frac{3}{4}$

Volts 40-60 and 90-130

2 c.p.—7 w.p.c.

3 c.p.—5.5 w.p.c.

4 c.p.—4.5 w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $3\frac{7}{8}$

Diam.  $1\frac{7}{8}$

Volts 40-60

4 c.p.—5.8 w.p.c.

5 c.p.—5 w.p.c.

6 c.p.—4.5 w.p.c.

8 c.p.—3.7 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $3\frac{7}{8}$

Diam.  $1\frac{7}{8}$

Volts 90-130

4 c.p.—5.8 w.p.c.

5 c.p.—5 w.p.c.

6 c.p.—4.5 w.p.c.

8 c.p.—3.7 w.p.c.

Made in clear, frosted and colored glass.



# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{8}$

Diam.  $2\frac{1}{8}$

Volts 40-60

6 c.p.— $4\frac{1}{4}$ , 4.8 and  $5\frac{1}{2}$  w.p.c.

8 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.

10 c.p.—3.1,  $3\frac{1}{2}$  and 4 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{8}$

Diam.  $2\frac{1}{8}$

Volts 90-130

6 c.p.— $4\frac{1}{4}$ , 4.8 and  $5\frac{1}{2}$  w.p.c.

8 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.

10 c.p.—3.1,  $3\frac{1}{2}$  and 4 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

GRADE FULL SIZE



Length 4 1/2"

Diam. 2 1/8"

Volts 100-200

8 wgs. 5 wgs.

10 wgs. 4.5 wgs.

Made in clear, frosted and colored glass

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{4}$

Diam.  $2\frac{3}{8}$

Volts 40-60

10 c.p.— $4\frac{1}{2}$  w.p.c.

12 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.

16 c.p.—3.1,  $3\frac{1}{2}$ , 3.6 and 4 w.p.c.

20 c.p.—3.1 to 3.6 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{4}$

Diam.  $2\frac{3}{8}$

Volts 90-130

10 c.p.— $4\frac{1}{2}$  w.p.c.

12 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.

16 c.p.—From 2.8 to  $4\frac{1}{4}$  w.p.c. as ordered.

20 c.p.—3.1 to 3.6 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{8}$

Diam.  $2\frac{1}{8}$

Volts 90-130

6 c.p.— $4\frac{1}{4}$ , 4.8 and  $5\frac{1}{2}$  w.p.c.

8 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.

10 c.p.—3.1,  $3\frac{1}{2}$  and 4 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{8}$

Diam.  $2\frac{1}{8}$

Volts 190-250

8 c.p.—5 w.p.c.

10 c.p.—4.5 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{3}{4}$

Diam.  $2\frac{3}{8}$

Volts 90-130

16 c.p.— $4\frac{1}{4}$  to  $4\frac{3}{4}$  w.p.c.

20 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.

24 and 25 c.p.—3.1,  $3\frac{1}{2}$  and 4 w.p.c.

Made in clear, frosted and colored glass.



# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $4\frac{1}{4}$

Diam.  $2\frac{1}{4}$

Volts 190-250

20 c.p. —  $4\frac{1}{2}$  w.p.c.

24 and 25 c.p. — 4 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $3\frac{3}{8}$

Diam.  $1\frac{3}{4}$

Volts 40-60 and 90-130

2 c.p.—7 w.p.c.

3 c.p.—5.5 w.p.c.

4 c.p.—4.5 w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Length  $3\frac{7}{8}$

Diam.  $1\frac{1}{8}$

Volts 40-60

4 c.p.—5.8 w.p.c.

5 c.p.—5 w.p.c.

6 c.p.—4.5 w.p.c.

8 c.p.—3.7 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE  $\frac{3}{4}$  SIZE



Length  $5\frac{1}{4}$

Diam.  $3\frac{1}{8}$

Volts 190-250

32 c.p.—4 w.p.c.

40 c.p.— $3\frac{1}{2}$  w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE  $\frac{3}{4}$  SIZE



Length  $6\frac{7}{8}$

Volts 40-60

Diam.  $3\frac{1}{4}$

40 c.p.— $3\frac{1}{2}$ , 4 and  $4\frac{1}{2}$  w.p.c.  
50 c.p.—3.1,  $3\frac{1}{2}$  and 4 w.p.c.

Made in clear, frosted and colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Tubular Lamp

Length  $4\frac{3}{8}$

Diam.  $1\frac{1}{4}$

Volts 40-60, 90-130

4 c.p.—5.8 w.p.c.

6 c.p.—4.5 w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Tubular Lamp

Length  $5\frac{1}{8}$

Diam.  $1\frac{1}{4}$

8 c.p.— $4\frac{1}{2}$  w.p.c., 40-60, 90-130 volts  
10 c.p.—4 w.p.c., 40-60, 90-130 volts  
16 c.p.— $3\frac{1}{2}$  w.p.c., 40-60 volts

Made in clear and frosted glass.

# THE SAWYER-MAN LAMP

SCALE  $\frac{1}{2}$  SIZE



Length 9

Diam.  $4\frac{1}{2}$

Volts 40-60

75 c.p.—3.6 w.p.c.

100 c.p.—3.1 w.p.c.

Made in clear and frosted only.



# THE SAWYER-MAN LAMP

SCALE  $\frac{1}{2}$  SIZE



Length 9

Diam.  $4\frac{1}{2}$

Volts 90-130

75 c.p.—3.6 and 4 w.p.c.

100 c.p.—3.1 and  $3\frac{1}{2}$  w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



3 $\frac{1}{8}$ '' Spherical Lamp

Length 4 $\frac{3}{8}$

Diam. 3 $\frac{1}{8}$

Volts 40-60, 90-130, 200-230

8 c.p.—4 and 4 $\frac{1}{2}$  w.p.c.

10 c.p.—4 w.p.c.

16 c.p.—3 $\frac{1}{2}$  and 4 w.p.c.

20 c.p.—3 $\frac{1}{2}$  w.p.c.

25 c.p.—3.1 w.p.c.

32 c.p.—3.5 w.p.c.

Made in clear and frosted glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



$3\frac{5}{8}$ " Spherical Lamp

Length 5

Diam.  $3\frac{5}{8}$

Volts 40-60, 90-130, 200-230

8 c.p.— $4\frac{1}{2}$  w.p.c.

16 c.p.— $3\frac{1}{2}$  w.p.c.

32 c.p.— $3\frac{1}{2}$  w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



R-2 Silvered Reflector Lamp

Length  $4\frac{1}{8}$

Diam.  $3\frac{1}{2}$

Color of backing, aluminum or maroon

Bulb clear, as represented, or frosted

Volts 40-60, 90-130, 200-230

Approximate end c.p. 42

Wattage consumption, 52 watts per lamp.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



2 $\frac{1}{4}$ " Spherical Lamp

Length 3 $\frac{1}{4}$

Diam. 2 $\frac{1}{4}$

Volts 40-60, 90-130

4 c.p.—5.8 w.p.c.

6 c.p.—4 $\frac{1}{2}$  w.p.c.

8 c.p.—4 $\frac{1}{2}$  w.p.c.

10 c.p.—4 w.p.c.

16 c.p.—3 $\frac{1}{2}$  w.p.c.

Made in clear, frosted or colored glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



3 $\frac{1}{8}$ '' Spherical Lamp

Length 4 $\frac{3}{8}$

Diam. 3 $\frac{1}{8}$

Volts 40-60, 90-130, 200-230

8 c.p.—4 and 4 $\frac{1}{2}$  w.p.c.

10 c.p.—4 w.p.c.

16 c.p.—3 $\frac{1}{2}$  and 4 w.p.c.

20 c.p.—3 $\frac{1}{2}$  w.p.c.

25 c.p.—3.1 w.p.c.

32 c.p.—3.5 w.p.c.

Made in clear and frosted glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



3 $\frac{5}{8}$ " Spherical Lamp

Length 5

Diam. 3 $\frac{3}{8}$

Volts 40-60, 90-130, 200-230

8 c.p.—4 $\frac{1}{2}$  w.p.c.

16 c.p.—3 $\frac{1}{2}$  w.p.c.

32 c.p.—3 $\frac{1}{2}$  w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



No. 2 LUMINO LAMP.

Length 4 1/4

Diam. 3 1/8

Volts 40-60, 90-130, 200-230

Approximate horizontal and end candle power, 16

Wattage consumption, 55 watts per lamp.



# THE SAWYER-MAN LAMP

SCALE FULL SIZE



NO. 1 LUMINO LAMP

Length 5

Diam.  $3\frac{3}{8}$

Volts 40-60, 90-130, 200-230

Approximate horizontal and end candle power, 30

Energy consumed, 110 watts.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Tubular Lamp

Length  $4\frac{3}{8}$

Diam.  $1\frac{1}{4}$

Volts 40-60, 90-130

4 c.p.—5.8 w.p.c.

6 c.p.—4.5 w.p.c.

Made in clear and frosted glass only.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Tubular Lamp

Length  $5\frac{1}{8}$

Diam.  $1\frac{1}{4}$

8 c.p.— $4\frac{1}{2}$  w.p.c., 40-60, 90-130 volts  
10 c.p.—4 w.p.c., 40-60, 90-130 volts  
16 c.p.— $3\frac{1}{2}$  w.p.c., 40-60 volts

Made in clear and frosted glass.

# THE SAWYER-MAN LAMP

SCALE FULL SIZE



Tubular Lamp

Length $5\frac{3}{4}$	16 c.p.—90-130 volts, 4	Diam. $1\frac{1}{4}$
	20 c.p.—90-130 volts, $3\frac{1}{2}$	w.p.c.
	32 c.p.—40-60 volts, $3\frac{1}{2}$	w.p.c.



Edison Swan



Comb. Ed. and Wes.



Brush Swan



Sawyer-Man or Westinghouse



United States



Schaefer or National



Wes. Stopper



Edison



Thompson-Houston  
Porcelain



Hawk Eye



Mather or Perkins

The principal types of bases as used for low candle power lamps are represented above.

The Edison, Thompson-Houston and Sawyer-Man or Westinghouse bases are the only ones used to any extent, and in comparative numbers as named. The Ediswan base is used extensively in England and English possessions, while the other bases shown are rapidly becoming obsolete.

## SAWYER-MAN ELECTRIC COMPANY

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ATLANTA, GA., Empire Building  
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BOSTON, MASS., Board of Trade Building  
BUFFALO, N. Y., Ellicott Square  
CHICAGO, ILL., New York Life Building  
CINCINNATI, OHIO, 1102 Traction Building  
CLEVELAND, OHIO, New England Building  
DALLAS, TEXAS, Scollard Building  
DENVER, COLO., Mountain Electric Company  
DETROIT, MICH., Union Trust Building  
LOS ANGELES, CAL., 621 Trust Building  
MINNEAPOLIS, MINN., Guaranty Loan Building  
NEW ORLEANS, LA., Hibernia Bank and Trust Building  
- PHILADELPHIA, PA., Land Title Building  
PITTSBURG, PA., Westinghouse Building  
ST. LOUIS, MO., National Bank of Commerce Building  
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SEATTLE, WASH., 314 Occidental Avenue  
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WORKS OF THE SAWYER-MAN ELECTRIC CO., NEW YORK CITY

